

ATTACHMENT J2

# Birmingham IAP (ANG), AL Potable Water System

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# **J2 Birmingham IAP (ANG), AL Potable Water System**

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## **J2.1 Birmingham IAP (ANG), AL Overview**

The 117<sup>th</sup> Air Refueling Wing, Alabama Air National Guard, is located at the Birmingham International Airport. The airport is located to the north and east of downtown Birmingham near the intersection of interstates I-20 and I-59. Originally subdivided by city streets, the ANG station was recently consolidated into a contiguous site by combining three separate real estate parcels into one.

With its roots in the formation of the Birmingham Flying Club, the unit was first federally recognized as the 135<sup>th</sup> Observation Squadron, Alabama Air National Guard. Renamed the 106<sup>th</sup> Observation Squadron in 1928, the unit flew and surveyed air mail routes in Alabama. In 1938, the unit moved to Birmingham International Airport. Called to active duty in 1940, the unit designation was changed to 106<sup>th</sup> Bombardment Squadron and was involved in the Second World War until its end. In 1951, the squadron was again called to active duty for 21 months during the Korean conflict. The unit was reverted to ANG status and became part of the 117<sup>th</sup> Tactical Reconnaissance Wing. The 117<sup>th</sup> was called to support the mission during the Berlin crisis in 1961.

In 1990 the unit was deployed to the Middle East in support of both Desert Shield and Desert Storm. Flying RF-4C aircraft, the 117<sup>th</sup> provided long-range photo reconnaissance along the Kuwait-Iraq border. The 117<sup>th</sup> returned to Birmingham after successfully completing the mission in December 1990.

In September 1994, the 117<sup>th</sup> Air Refueling Wing and 106<sup>th</sup> Air Refueling Squadron was formed and equipped with KC-135 tanker aircraft. Simultaneously, a major revision outlined in the Base Master Plan was initiated to complete improvements in the infrastructure to support the new mission, to unify the existing real estate holdings into one contiguous environ and to implement facility improvements and additions necessary to support the mission. The Master Plan recommendations included the relocation of a city thoroughfare, consolidation of three real estate parcels and the completion of almost \$64 million in facility improvements and construction. To date, all but one of the recommended projects are complete, and it is in the final stages of design.

Birmingham IAP (ANG) consists of approximately 147 acres and essential facilities to support the mission of the 117<sup>th</sup> ARW and its assigned units. A lease between the Federal Government and The Armory Commission of Alabama, dated 22 January 1961, currently with four Supplemental Agreements, established the initial boundaries and conveyed the lands and buildings for the purpose of military aviation. A Lease Amendment between the Birmingham Airport Authority and the Commission in 1988 established the real estate relationship between the airport authority and the Armory Commission. The lease term expires in the year 2036 but shall continue year to year without notice unless terminated by the Commission.

Prior to 1996, the base was bisected by two city streets - East Lake Blvd and Shelby Blvd. As a part of the Master Plan update, East Lake Blvd was rerouted around the base perimeter, Shelby Blvd was transferred to the ANG with a lease amendment, and the individual land parcels were consolidated

into one tract of land. This consolidation greatly improved internal traffic circulation, security and unit operations. Prior to the road relocation, this area was in a municipal environment with the utilities routed along the city street easements and rights of way. Sewer and water mains are presently along the main street thoroughfare and each facility or small group of facilities are connected to the mains by branch connections or laterals. Individual water meters are installed to meter usage at one or multiple buildings on the base.

The 117<sup>th</sup> ARW occupies 101 facilities including offices, mission support structures, maintenance hangars, POL storage and refueling station and a Joint Hospital. The Wing currently has 9 authorized KC-135 Stratotankers. The current compliment of personnel is 275, including military and civilian employees. This expands to 1,243 personnel for UTA weekends and during activation.

The Alabama Army National Guard (ARNG) has facilities and units co-located on the base. These facilities provide for aircraft hangar and maintenance, the 109<sup>th</sup> Evacuation Hospital and OMS storage facility. The 109<sup>th</sup> Evac Hospital also supports ARNG/ANG weekend drill activities and unit activations. In addition, the Federal Aviation Administration has two radar sites within the confines of the base.

The Federal Aviation Administration and the ARNG facilities and units are not included as part of this evaluation.

## **J2.2 Water System Description**

### **J2.2.1 Water System Fixed Equipment Inventory**

The Birmingham IAP (ANG), AL water system consists of all appurtenance physically connected to the distribution system from the point in which the distribution system enters the base to the point of demarcation defined by the real estate instruments (Exhibit B).. The system may include, but is not limited to, pipelines, valves, fire hydrants, storage facilities, exterior backflow devices, pumps, and meters. The following description and inventory is included to provide the Contractor a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base the proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

#### **J2.2.1.1 Description**

The Birmingham IAP (ANG) purchases potable water from the City of Birmingham. The base is fed from a 12-inch water main along East Lake Boulevard. The ANG base has 13 metered potable water connections from the public utility plus 6 fire system meters. The meters are maintained by the utility. The calculated average daily usage based on three years data records is approximately 18,400 gpd.

Water is distributed throughout the installation through underground pipelines, ranging in size up to 2 inches in diameter. The original system was installed beginning in 1938 and upgrades and replacements have been added as the base expanded, or as buildings were replaced over the years. Pipe materials of construction include PVC and cast iron. Overall, there is an estimated 4,740 lineal feet of distribution pipe ranging from 1-½ to 2 inches in diameter with associated isolation valves. There are no significant sections of water main owned by the base. The water distribution system

essentially consists of service connections to the buildings. There are no pump stations, wells, storage tanks, or treatment facilities located on the base.

### J2.2.1.2 Inventory

**Table 1** provides a general listing of the major water system fixed assets for the Birmingham IAP (ANG), AL water system included in the purchase. The system will be sold in a "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to many any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

**TABLE 1**

Fixed Inventory

*Water Utility System Birmingham IAP (ANG), AL*

*J2.2.2 Water System Non-Fixed Equipment and Specialized Tools Inventory*

QTY	UNIT	DESCRIPTION	AGE
2	EA	Piping valves, butterfly valves with boxes, cast iron, 4" diameter	15
1	EA	Piping valves, butterfly valves with boxes, cast iron, 6" diameter	15
3	EA	Piping valves, butterfly valves with boxes, cast iron, 8" diameter	1
4	EA	Piping valves, butterfly valves with boxes, cast iron, 10" diameter	15
2	EA	Backflow pvnt, incl gtv, & 4 tst cocks, rdcd press, flg, iron, 10" pipe	17
1	EA	Backflow pvnt, incl gtv, & 4 tst cocks, rdcd press, flg, iron, 8" pipe	17
720	LF	Piping, polyvinyl chloride pipe, class 160, s.d.r.-26, 1-1/2" diam	45
1,020	LF	Piping, polyvinyl chloride pipe, class 160, s.d.r.-26, 1-1/2" diam	1
3,000	LF	Piping, polyvinyl chloride pipe, class 160, 2" diameter	44
790	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 4" dia	21
570	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 6" dia	45
480	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 6" dia	21
230	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 8" dia	21
2,250	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 8" dia	21
1,420	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 8" dia	44
2,630	LF	Piping, HDPE butt fusion jts, SDR 21, 40' L, 10" dia	44
7	EA	Water sply ms, dom/coml, brz, thd/flgd, 1.5" dia, to 100 GPM	1
7	EA	Water sply ms, dom/coml, brz, thd/flgd, 2" dia, to 160 GPM	14
1	EA	Water sply ms, dom/coml, brz, flgd, compound, 8" dia, to 1,800 GPM	14
1	EA	Water sply ms, dom/coml, brz, flgd, compound, 6" dia, to 1,000 GPM	18
1	EA	Utility vaults, precast concrete, 6' x 10' x 6' high, i.d	54
21	EA	Piping, fire hydrants, 4-1/2" valve size, depth 3'-0"	6
5	EA	Piping, fire hydrants, 4-1/2" valve size, depth 3'-0"	29

**NOTES:**

EA = each

HDPE = high density polyethylene

LF = lineal feet

SDR = specific dimension ratio

**Table 2** lists the other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting his bid. Offerors shall make his own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

**TABLE 2**

Spare Parts

*Water System Birmingham IAP (ANG), AL*

Qty	Make/Model	Description	Remarks
NONE			

**TABLE 3**

Specialized Vehicles and Tools

*Water System Birmingham IAP (ANG), AL*

Description	Quantity	Location	Maker
NONE			

### J2.2.3 Water System Manuals, Drawings, and Records Inventory

Table 4 provides a listing of manuals, drawings, and records that will be transferred with the system (e.g. water quality records, flow studies, etc.).

**TABLE 4**

Manuals and Records

*Water System Birmingham IAP (ANG), AL*

Qty	Item	Description	Remarks
1 Set	As Built Drawings		See Base Civil Engineer
1 Set	Flow Tests - Fire Water		See Base Civil Engineer

## J2.3 Requirements and Standards

The service requirements and standards for the Birmingham IAP (ANG), AL water distribution system are as defined in the Section C, *Description/Specifications/Work Statement*.

## J2.4 Current Service Arrangement

Birmingham IAP (ANG) purchases its water from Birmingham Water Works. Birmingham monthly water meter readings from the period September 1997 through May 1999 indicate an average daily demand of 18,400 gpd. The highest monthly usage in the period was in August 1998 when an average of 38,945 gpd was used. Annual consumption is approximately 6,600,000 gallons.

## J2.5. Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

### J2.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J2.6 below.

**TABLE 5**

Existing Secondary Meters

*Water System Birmingham IAP (ANG), AL IAP*

Meter Location	Meter Description (Type)
All meters on the installation are property of the municipal water works and are not Air Force assets. They may not be available to this privatization effort.	

### J2.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in Table 6. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J2.6 below.

**TABLE 6**

New Secondary Meters

*Water System Birmingham IAP (ANG), AL*

Meter Location	Meter Description
NONE	

## J2.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the address to be identified at time of award.
2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the address to be identified at time of award.

3. **Meter Reading Report.** The monthly meter reading report shall show the current and previous month readings for all identified secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to the address to be identified at time of award.

## J2.7 Water Conservation Projects

IAW C.3, Utility Service Requirement, NO projects have been implemented by the Government for conservation purposes.

-----None identified-----

## J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Birmingham IAP (ANG), AL boundaries.

## J2.9 Off-Installation Sites

No off-installation sites are included in the sale of the Birmingham IAP (ANG), AL water distribution system.

## J2.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the Birmingham IAP (ANG), AL water distribution system.

**TABLE 7**  
Service Connections and Disconnections  
*Water System IAP (ANG), AL*

Location	Description
NONE	

**TABLE 8**  
System Improvement Projects  
*Water System Birmingham IAP (ANG), AL*

Project Location	Project Description
NONE	